### COMPUTER AND INFORMATION SCIENCE AND ENGINEERING



"ERROR ACC127. Couldn't find file WZN3.MDA. What do you want to do?":

The Future of Software?

Michael Evangelist

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#### PAST HITS AND MISSES



Greatest success: Our \$400 billion industry

Greatest disappointment: Help that research (industry) has given to industry (research)

#### SOFTWARE RESEARCH TODAY



Good: Increasing emphasis on empirical investigation and validation

Bad: Increasing resistance to empirical investigation and validation

#### IT MIGHT NOT GET EASIER



## 5-10 years: "Commodization" of computing — from millions to billions of users

- will the billions read error messages?
- moving applications to servers changes "customer" concept

#### IT MIGHT NOT GET EASIER, II



# 15-20 years: Radically new computing "platforms" built with nanotechnologies

- how to create software for 100 million interconnected processors?
- where does the error message appear when the software is in your knee?